



THE AGA KHAN UNIVERSITY

eCommons@AKU

Institute for Educational Development, Karachi

Institute for Educational Development

July 2011

Understanding how practices of teacher education in Pakistan compare with the popular theories and theories and narrative of reform of teacher education in international context

Takbir Ali

Aga Khan University, Institute for Educational Development, Karachi

Follow this and additional works at: http://ecommons.aku.edu/pakistan_ied_pdck

Recommended Citation

Ali, T. (2011). Understanding how practices of teacher education in Pakistan compare with the popular theories and theories and narrative of reform of teacher education in international context. *International Journal of Humanities and Social Sciences*, 1(8), 208-222.
Available at: http://ecommons.aku.edu/pakistan_ied_pdck/84

Understanding how Practices of Teacher Education in Pakistan Compare with the Popular Theories and Narrative of Reforms of Teacher Education in International Context

Takbir Ali, Ph.D.

Senior Instructor

Aga Khan University-Institute for Educational Development

PDC-IED, 1-5/B-VII, Karimabad,

Federal "B" Area, Karachi-75950, Pakistan

Email: takbir.ali@aku.edu, Phone: 092-21 36347611

Abstract

Movements to reform teacher education are underway in many parts of the world, including Europe, Australia, North America and many other developing countries. The directions of and the approaches to these reforms vary in each country. Invariably changing educational policies across countries, innovations, research, and ongoing discourse in the field have contributed to new ways of understanding teacher education in different societies. This reflective paper examines the critical gaps in understanding the main causes underlying core issues facing teacher education and professional development in Pakistan; how the efforts and perspectives about reforming teacher education in Pakistan compare with the practices and the popular narratives shaping the discourse on teacher education in international/global context. The prevalent discourse around teacher education in Pakistan clearly reflects a narrow focus in that the literature produced in Pakistan tends to over emphasize the structural and organizational issues, and there is a clear tendency to over look the philosophical, conceptual and pedagogical underpinnings to teacher education practices, which have received greater attention in the international context. The Pakistani perspective on teachers' learning and development stresses upon the technical aspect of teaching profession, which involves subject knowledge and a fixed set of skills required to transfer that knowledge to students. Teachers' leaning in other critical domains such as personal, social and ethical, immensely emphasized in the international literature, have received little or no attention in Pakistani context. The narratives of reform, particularly approaches to teachers' continued professional development including reflective practice, action/collaborative research and ICT and many other informal way of learning have gained wide popularity in the literature in the international context.

Key Words: teacher education and profession development, teacher education and professional in Pakistan, international perspective on teacher education and professional development, theories and narratives of reform in teacher education, in-service teacher education, preserves teacher education

INTRODUCTION AND BACKGROUND

It is widely recognized that overall the quality of education provided by the public sector in Pakistan has been poor due to a large variety of factors. The notion of 'poor quality' of education is characterized by multiple indicators. However, at a fundamental level, it is concerned with the ways in which children are made to learn information through rote memorization with a limited purpose of reproducing it in the examinations (Hayes, 1996; Jaffer, 2005). The environment within schools and classroom pedagogies do not encourage children to engage in in-depth cognitive learning and use their own judgment and exercise their critical abilities in efforts to understand what it all means to learn what is presented to them in the school (Government of Pakistan, 2006c, 2002a; Sultana, 2001; World Bank 2006).

Research studies have established relationships between teacher development and students' learning (Guskey & Spark, 1996; Halai et al., 2004; Joyce & Showers; Shah, 2000; Sykes, 1999). According to the Pakistan Educational Statistics 2008-2009 (Academy of Educational Planning and Management, 2009), above 90 percent of teachers working in public-sector schools in Pakistan are trained. Unfortunately, the impact of teacher training both through pre-service and in-service programmes is not seen on students' achievement. There are numerous factors which are held responsible for the poor quality of education, especially in public-sector schools. The quality of education imparted by schools in general and public-sector schools is being criticized deeply and widely (Academy of Educational Development; Aga Khan University, 2002; Ahmed, 2009; Government of Pakistan, 2005, 2002c). The poor quality reflected in students' learning is being attributed largely to the poor quality of teachers serving in these schools. The National Education Policy (2009) well captures the scenario:

The reform of teaching quality is of the highest priority. There is a consensus amongst all stakeholders that the quality of teachers in the public sector is unsatisfactory. Poor quality of teacher in the system in a large number is owed to mutations in governance, an obsolete pre-service training structure and a less than adequate in-service training regime. Presence of incompetence in such a huge quantity and permeation of malpractices in the profession have eroded the once exalted position enjoyed by teachers under the eastern cultural milieu (p.43).

Teacher's quality is determined by the level of professional competencies which is inclusive of knowledge, understanding, skills, and attitudes he or she brings to the teaching profession. Teachers' lacking required level of professional competence is attributed, albeit partly, to the dysfunctional teacher education system in the country (Aga Khan Foundation Pakistan, 1998; DIFSD & USAID, 2008; Nizamani, Manzoor-ul-Haque, 1998). It is widely agreed that the quality or competence of the teacher is determined largely by the quality of initial and in-service education the teacher receives. The National Education Policy 2009 alludes to a direct relationship between the deteriorating quality of education and obsolete pre-service structure and less than adequate in-service training system. Teacher education, thus, as a vital part of education system, has failed to respond to the rapidly changing socio-economic realities in Pakistan and issues related to the improvement of the quality of education system. There are hundreds, if not hundreds of reports, situation analysis or positions papers that have looked into teacher education in Pakistan. An overview of the existing literature constituted by Government reports, policy documents, independent studies, numerous documents produced by donor funded projects, and etc. identifies the gaps that apparently exist in the current discourse on teacher education in Pakistan. The literature reflects a broader consensus on the issues and problems that impede improvement in teacher education in Pakistan. It, however, does not engage in deeper analysis of the main causes underlying these issues.

The existing literature on teacher education in Pakistan focuses attention on a wide array of issues, tensions, and challenges at both macro and micro levels confronting teacher education and educational change in Pakistan (Academy for Educational Development, 2005; Asian Development Bank, 1992; Barber, 2010; Government of Pakistan, 2002b, Jamil, 2004; Hoodbhoy 1998; UNESCO, 2008, 2006c). The recommendations made or the corrective measure proposed, however, do not provide comprehensive policy guidelines that are needed to better interpret the problems of teacher education, understand the causes underlying them and develop programmes accordingly to address these structural or organizational problems. Hence, despite the good efforts made in the various reports to provide descriptive account of teacher education in Pakistan, much remains to be done to fully understand the root causes of the major challenges that cut across all facets of teacher education. The large part of the mainstream literature that has looked into the status of teacher education contemporary issues and opportunities to overcome these issues tends to be descriptive in its analysis of core issues and prescriptive in suggesting solutions to these problems. Issues have been identified and discussed in an isolated fashion rather than explaining the complex interrelationship among the causes underlying these issues. There is a clear lack of efforts in understanding the dynamics of teacher education and its relationship with school education from the perspectives of the fresh knowledge emanating from research in the local and international context.

There is a need to seek to better understand into the causes underlying the issues that cut across various aspects of teacher education; how the discourse in the country compares with the common vision for reforming teacher education and making it responsive to the changing socio-cultural realities in the global context. With this purpose in mind, a critical overview of contemporary literatures was undertaken with the following entwined objectives:

- to recognize the critical gaps in understanding the main causes underlying core issues facing teacher education and professional development in Pakistan; and
- to see how the efforts and perspectives about reforming teacher education in Pakistan compare with the practices and the popular narratives shaping the discourse on teacher education in international/global context.

Sources of Literature

The available literature on teacher education in Pakistan mainly consists of various conference reports, national surveys, national education policy documents, positions papers, working documents, commission reports, Five Year Plans, books, edited books, monograms, and other nationally and regionally applicable reform documents, including project evaluation reports or impact studies, published research, monograms, government-sponsored, and independent studies, and reports on donor funded programmes, etc.

The general body of applicable literature on teacher education in the context of both developed and developing countries was also reviewed to identify cross-cutting ideas and dominant popular narratives of teacher education in Pakistan and international context. Review of the international literature on the subject helped to know about cross cultural perspectives, especially insights from research that has contributed significantly to the development of teacher education in developed Western societies as well as in the fast progressing developing countries.

Cross-cutting Issues and its Causes

The departure point of the history of teacher education in Pakistan is traced back to the time when Pakistan came into existence as an independent state in 1947. The National Education Policies and Five Years Plans developed and implemented over a period of 64 years have treated teacher education as a sub-sector of education. Overview of the history of developments in teacher education in Pakistan suggests that, there has been significant quantitative expansion in terms of number of institutions established over a period of time and large number of teachers being trained in these institutions. Presently, nearly 300 institutions in public and private sectors offer a variety of teacher education programmes ranging from certificate courses to Ph.D in education (Government of Pakistan, 2009; USAID & UNESCO, 2009). This is quite impressive development. However, from qualitative aspect the system has suffered from stagnation, or has further deteriorated over a period of time. A closer look at the cross-cutting challenges in teacher education suggests that the field has mainly suffered in terms of 'quality' and 'relevance'. Various national surveys, studies and reports have cited a range of problems that affect teacher performance and quality (Butt & Shams, 2007; USAID, 2004; Mahmood; World Bank & DIFSD, 2005). The literature is consistent in emphasizing the correlation between the steady declination in the status of teaching profession, particularly poor quality of initial and in-service training imparted to teachers and poor students' learning outcomes recorded over years in Pakistan (Government of Pakistan, 2004b, 2002; PTEPDP, 2004).

The perception is widely shared that in-service and pre-service teacher education programmes offered at most of the public sector institutions are of substandard in that they are rigid, textbook and examination based. The dominant pedagogy used in these programmes is characterized by chalk-and-talk, memorization or lecture (Elaine, 2005; Rough, Malik, & Farooq, 1991; Warwick & Reimers, 1991; World Population Foundation, 2009). The motivation for teacher to undertake pre-service or in-service courses mainly has been earning a certificate/degree or diploma because of the benefits attached to it in terms of increase in salary and prospect of promotion to upper salary scale. Teacher education programmes therefore do not emphasize the need for such personal and professional competencies and qualities a good or an effective teacher embodies. All public and private sector teacher education institutions in the country are responsible to offer teacher education programmes that meet the schools' demands, more importantly, the children's learning needs. As a matter of fact the strong linkage of teacher education with schools education has not been realized.

Through the history stretched over 6 decades there is no evidence of serious effort by any government to address some of the critical questions concerning the *relevance* of teacher education to improvement in the quality of education in schools. At very fundamental level the necessary link between teacher education and school education is missing. Teacher education has been treated as mundane activities within the education system instead of using it as a means to improving quality of students' learning in the schools. The kind of teaching and learning practice prevalent in the vast majority of public schools classroom in Pakistan is a manifestation of the huge gap between teacher education and school education system (Government of Pakistan, 2006b; 2004b; UNESCO, 2002b). The main cause underlying the critical gaps in efforts to improve teacher education in the country may be attributed to the failure of implementation of education policy which in turn is linked with the serious lack of the will of the government.

Teacher Education and Education policy

At the level of rhetoric teacher education has been recognized forming the bedrock of education system. Successive National Educational Policies, and Five Year Plans, however, seem to have made lofty claims or false promises as regard developing and reforming teacher education system in the country without considering the ground realities. The promises made in the successive National Educational Policies and Five Year Plans have largely remained unfulfilled. Not a single policy was followed by serious efforts to implement the plans and reform measures envisaged in the successive National Educational Policies. The most crucial factor for this failure is lack of political will and national vision, which have resulted in insufficient resources allocation, poor governance and dysfunctional management system (Barber, 2010; DfID & USAID, 2006). The need for expanding, streamlining or institutionalizing in-service education opportunities for teachers and teacher educators have been over emphasized in the literature coming from different sources in Pakistan (Khan, 2009; Asian Development Bank, 2002; Davis & Iqbal, 1998; Directorate of Staff Development, Punjab, 2006).

Currently the line that divides pre-service and in-service training programmes is blurred; there is a need to have a well-defined comprehensive policy framework at national level to direct in-service teacher education activities in the country. In fact, despite the emphasis on the expansion of and improvement in the quality of in-service programmes for teachers of various grades and subjects in education policies, no concrete action has been taken at national level to enhance access to in-service training opportunities and improve the quality of existing programmes, which are being organized on ad hoc basis. For in-service teacher training the government has depended heavily on donor funded programmes (Mohammad, et al., 2007; USAID, UNESCO & Idara-e-Taleem-o-Aaghhi, 2008).

Over Dependency on Donor Funded Programmes

Numerous donor funded programmes have been implemented over past many years to enhance access and improve quality of teacher education in Pakistan. These programmes have been implemented in all four provinces, Federally Administered Tribal Areas, Federally Administered Northern Areas (now Gilgit-Baltistan) and Azad Jammu and Kashmir with partnership with Government Department of education or NGOs and private sector institutions. Most of donor funded programmes have focused on in-service teacher professional development as an approach to institutional capacity building. The donor funded projects have variously contributed to teacher education in Pakistan in general, female and rural teachers in particular. They through various innovative interventions have attempted to set new trends and traditions in in-service teacher education, the long term impact or sustainability of these interventions yet remains questionable. In fact, despite proliferation of in-service training programmes through donor funded projects there is an obvious lack of studies, particularly policy relevant studies to determine the long term impact of donor funded projects on the quality of services contributing to teacher education. Critical overview of the existing literature suggests that most of the donor funded projects seem to have emphasized achieving quantitative targets rather than focusing on qualitative change in the services of teachers education.

Either the government or these projects do not seem to have succeeded in institutionalizing programmes and models introduced in teacher education, particularly in in-service training (Mohammad et al., 2007). As a result, despite their good intention, these programmes have not been able to bring about sustainable change in the quality of teaching and learning cultures in schools. In most of case the changes introduced by these programmes have proved to be bubbles on the water surface; changes or the effects of these changes disappeared when the funding dried up. The international community needs to seriously consider this fact before committing funding to such programmes in future. A similar problem that these donor funded projects or programmes pose is the length and the frequency of the trainings that they provide to the teachers and head teachers. Research points at the ineffectiveness of “one-shot” workshops (Fullan & Stielgebauer, 1991). However, it seems that the donor funded projects do not keep this in mind when providing trainings, there does not seem to be a viable mechanism for institutionalization of programmes or innovation in teachers’ in-service education. Recognizing this, the National Education Policy 2009 underscores the need for creation of a system for donor harmonization and improved coordination between development partners and government agencies. Almost 2 years have passed since the NEP 2009 was announced but no concrete measures have been taken yet to put the policy recommendations into action.

Yet another problem with donor funded programme is that their main thrust or focus has been change in pedagogical practices in the classroom through enhanced teacher’s competence. One of the key lessons the literature on educational change offers is that pedagogical changes are not sustainable and at times unaffordable on a large scale if they are not backed by corresponding changes in the world where classrooms are located (Fullan, 2001; Hargreaves, 1997). Therefore, in many cases, meaningful pedagogical change may be practically difficult if not impossible without addressing other critical aspects of classroom and school structure and culture, which among other elements, includes resources, facilities, curriculum, assessment system and relationships. Change towards desirable teaching practices thus appears to be complex, long and tedious process, when there is no organizational structural in place to support pedagogical change in government schools (Fullan, 2001).

Place of Research in Reform in Teacher Education

Globally teacher education has been a focal point of discourse on educational reforms. Research in the realm of teacher education got intensified, particularly in developed countries and as a result, an impressive body of good quality knowledge on teacher learning and development has become available. This research knowledge has helped in many countries transformed policy and practice of teacher education. Unfortunately, teacher education in Pakistan has distanced itself from global trends in thinking about reforms in teacher education.

In Pakistan, Faculty/Department of education at public sector universities and other leading institutions such as Institute for Educational Research (IER), Provincial Institute of Teacher Education, Bureau of Curriculum,

Education Planning and Management are expected to direct their resources and efforts for research intended at generation of useful knowledge. In fact, they seem to have failed to contribute to development of teacher education in the country through quality research output and dissemination. These institutions receive substantial funds from federal or provincial or district governments to promote research and disseminate lessons learnt. Apparently there is no good reason as why these institutions, particularly the departments or faculties of education at universities do not become models of good practice in the area of research as well as academic programmes. In fact, these institutions are not being held accountable for what they receive in terms of resources and what they deliver. There should not be any doubt that without these forms of public accountability, improvement in the status of teacher education would continue to remain a utopian dream.

Private Sector and Teacher Education

There is a growing emphasis on the participation of private sector (Government of Pakistan, 2009, 2006a; 2004a; 2002a; Gulzar, Bari & Ejaz, 2005; World Bank, 1996). Resultantly, private sector is increasingly becoming a major player in teacher education; the trend however is commercialization of teacher education. Only a few institutions in the private sector are recognized for designing and delivering quality pre-service and in-service training programmes based on state-of-the-art knowledge of the practice and profession of teaching. These institutions are trying to promote teaching and learning practices in the classroom that are participatory, more interactive, which focus on fostering conceptual understanding, critical thinking, and problem solving skills (Saleem, 2009; Kazilbash, 1998; UNESCO, 2006c). There has been an obvious lack of efforts on the part of government to learn from the work undertaken by the private sector. The government system can adopt innovative models and approaches to teacher education successfully tested in the private sector.

To sum up the above reflections, some of the major problems facing education system in Pakistan owe their origin to the critical deficiencies in the system of teacher education. The factors contributing to deficient teacher education system are complex, multilayered and intricately interlinked. However, at fundamental level critical deficiencies in teacher education have their roots in the acute lack of will of political leadership to reform the system which has resulted in the huge gap between policies and actual implementation of policies. Policies are replete with false promises or lofty claims about improving the system of teacher education. The areas identified or targets or goals set for interventions are either too many or unachievable within the limits of given resources and timeline. A closer look at the successive education policies reveals a serious lack of connection between policy recommendations and actual action plan to implement these recommendations.

Teacher Education: Pakistani versus International Narratives of Reform

Teacher education is a complex, multifaceted and ever changing field. The concern for the quality of education calls for a more demanding vision of teaching and teacher education in any country in the world. A comparative overview of the literature on teacher education in Pakistan and international context recognizes a few critical gaps in the understanding and practices of teacher education in Pakistan. In Pakistan there seems to be a considerable shift in thinking about school educational improvement and teacher's pivotal role in it. In recognition of teachers' strategic role in school reform effort, which has been consistently recognized throughout successive National Education Policies, teacher education has been considered a key area of the reform. All reports produced by government recognize teacher's central role in school reform and emphasize efforts to enhance the status of teachers and teaching profession at large. This emphasis is very much consistent with the international literature on teachers' role in educational change and school improvement. "Educational change depends on what teachers do and think", Fullan (1991, p.117), opines.

In fact, a critical look at the indigenous literature's attempt at depicting teacher education clearly reflect a narrow focus in that the literature tends to over emphasize the structural and organizational issue, and there is a clear tendency to over look the conceptual and pedagogical underpinnings to teacher education practices. Moreover, the discourse on teacher education tends to stress upon the technical aspect of teaching, which involves subject knowledge and a fixed set of skills required to transfer that knowledge to students. Other critical dimensions of teacher education, emphasized in the international literature, including personal, social, and moral seem to have received little or no attention. The literature on teacher education in Pakistan appears to be heavily influenced by the theories and assumptions that underpin the traditional transmission paradigm of teacher education and development, which regards teaching as an individually centered, culturally and socially neutral kind of activity aiming at the transmission of knowledge (Cole & Knowles, 2000; Joyce, 1987; Little, 1993). The "technical paradigm" (Frechner, 1983; Levine, 2006; Lewin & Stuart, 2003) implies that the process of becoming a teacher is simply learning to teach. This view considers teaching as a technical activity, and the role of the teacher as a technician is to equip himself or herself with the necessary knowledge and skills required by the teaching task (Dewey, 1964; Cocheran-Smith & Fires, 2001; Valli, 1990).

Such a view of teacher education and development tends to focus on the acquisition of teaching skills required to deal with routines or predictable situations inside the classroom. However, this view fails to recognize the dynamics of the classroom, complex realities of the school, teachers' personal make up, life and family circumstances. As Valli (1990) argues, "Life in classroom is dynamic and uncertain, that answers to teaching problems are not a simple process of rule application, and that teachers must exercise wisdom of practice" (p.38). Similarly, Dewey (1964) has also stressed, "Education programmes should produce students of teaching who are thoughtful about educational theory and principles rather than skill only in the routines, mere technician, copiers, and followers of tradition and example" (p. 38). The typical pre-service teacher education programmes in Pakistan appear to be heavily influenced by the theories and assumption that underpin the technical paradigm widely criticized in the international literature.

On the other hand other, the emerging paradigms within teacher education and professional development such as "reflective practice" (Schon, 1983) and "inquiry" (e.g. Joyce, 1987; Dawson, 2006), "lifelong learning" (Longworth & Davies, 1996; Thiessen, & Pike 1992), view the teacher as an active agent in his or her own development. They aim at developing inquiry attitude as well as practical skills in teachers. A teacher is expected to be aware of the origins and the consequences of his or her own decisions, actions, behaviors and the realities that may constraint these actions (Luke & McArdle, 2009). The greater is the likelihood that the teacher can control and change both actions and the constraints and solve problems associated with pedagogy and educational change. The classroom is an enormously complex place requiring vast teacher knowledge and understanding as well as skills and abilities in coping with emerging problems. Because given the nature of their work, teachers are not to be dependent on a fixed body of knowledge of teaching and technical skills which they acquire participating in teacher development programs; and teachers' experiences in different work contexts are the sources from where teachers can derive new insights and understanding (Darling-Hammond, 2002; Lawton, 1996).

Moreover, the growing body of research on teacher change and development suggests that problems that complicate teacher's work in the classroom do not exist in isolation; they are intricately interlinked. Teachers' life and work are socially constructed and powerfully influenced by the choices and constraints of the larger society (Bottery, 2006; Darling-Hammond, 1996; Hargreaves, 1997). Researchers and change leading theorists stress the importance of broadening our approach to educational change and school improvement. This according them inevitably requires to diversifying teachers' role in change by extending teachers' work beyond the school into homes, communities and workplaces (Hargreaves, 1999, Fullan, 2001). Teachers are required to see "themselves at the heart of any project to improve school and society" (Thiessen, 1993, 297). The literature also recognizes the contextualized and personalized nature of teacher's knowledge, influences of biographies on teaching practices and teachers using ways of thinking and method of teaching inherited from their teachers and school experiences (Beattie, 2001; Boyle, While & Boyle, 2003; Cole & Knowles, 2000; Clandinin & Connelly, 1995; Marshall, 2009; Thiessen & Kilcher, 1993). Studies conducted in Pakistan confirm the findings of similar studies from the international contexts, which have found teachers as being the product of various influences of their socio-economic, religious and cultural structures (e.g., Ali, 2007; Ashraf, 2004; Bashiruddin, 2003; Halai, 2001; Fred, 2000; Matice, 2002; Rizvi, 2004).

The above perspectives suggest that teacher education system can be better understood in the light of particular culture and society; what happens outside the school is more important than what happens inside because it shapes and influences what takes place inside the school. This underscores the need for recognizing the links between political, socio-economic contexts and teacher education, thus necessitating the need for in-depth understanding of the forces, factors and the nation's character, socio-cultural philosophy that shape the nation's teacher education system, within which teachers learn, develop and work. Hence, in the final analysis, education, political and social problems are inseparable; requiring deeper understanding of culture and context. It also requires attention to political factors and other variations in national efforts to promote new forms of practice in educational improvement in schools through new modalities in teacher education.

There is a wide agreement on the view that teacher possesses a unique set of personality traits and pattern of behaviors. Teacher's total personality is shaped by prior life experiences and social circumstances in which he or she lives. Teacher's pedagogical beliefs, behaviors and practices are grounded in his or her unique personality. In this context, teacher education and development may be regarded as individual development and to a great extent it is affected by the social-cultural and political forces and as well as the various encounters teachers' experiences in their daily lives. Hargreaves (1991a pp. 255-256) argues, "To change the teacher is to change the person the teacher is". Analysis of approach to teacher development in Pakistan has overlooked the perspective on the influences personal and biographical factors exert on teacher change.

Teacher development is not necessarily the result of the initial training he or she receives before or upon entry into teaching; rather it is an outcome of the continuous struggles and reflections on daily experiences inside and outside the classroom. There are greater chances for influencing teachers' learning and development by unfolding teachers' biographies, by exploring their thinking, beliefs and practices in relation to students, pedagogy, classroom processes and structures, and by examining the role complexity with an aim to recognize evolving identities of teachers. At a glance these dimensions, however, appear to be extended components of teaching function, but in a close observation they are strongly glued with the teacher education and inextricably interlinked with each other. Moreover, the international literature on teacher education emphasizes the need for enhancing teachers' and students' critical abilities in 21st century to understand and address issues pertaining to the areas such as social justice and gender equity and fairness, peace and security, the environment, economy, technology, personal empowerment, and citizenship development (Kubow, 1999; Niyozov, 2001; Tay-Koay, 1999; Zeller & Grandson, 1997; Zeichner, 2009). In fact, these were recommended as possible themes to pre-service programs in many developed as well as in forward looking developing countries.

As Zeichner and Flessner (2009) report number of efforts by teacher educators being made in a number of countries to "prepare teachers as agents of social change who will work with their colleagues and local committees to ameliorate problems of inequity and injustices in schooling and the broader society" (p.24). To be faced with a variety of issues of social inequity and injustices, Pakistani society needs efforts at different fronts, including teacher education to address issues arising from deeply rooted and widely spread practices of social inequity and injustices. As thinking in teaching and teacher education progresses, realities of the social world changes various new images or identities of teachers emerges. Diversification of teachers roles presents teachers as innovators, leaders, social reformers, emancipators, public intellectual, moral agents, and catalyst for educational change and social justices, etc. (e.g., Ali, 2007; Giroux, 1995; Glatthorn, 1992; Nodding, 2001; Randi & Corno, 1997; Sergiovani, 1992; Strike & Soltis, 1992), thus entails teachers in any society to combine their role as educators and active agent for social and educational change. Giroux (1995), for example, explains, "What is at issue here is a commitment on the part of teachers as public servants to extend the principle of social justice to all sphere of economic, political, and cultural life" (p.378).

To summarize, the mainstream literature on teacher education in Pakistan clearly reflects a narrow focus in that there is an over emphasis on the structural and organizational issue; there is a clear tendency to over look the conceptual and pedagogical underpinnings to teacher education practices. Stress is on the technical aspect of teaching, which involves subject knowledge and a fixed set of skills required to transfer that knowledge to students. Popular narratives in international context emphasize transformation in intellectual, personal, social, and moral dimensions of teacher education and professional development. They help us enhance our understanding of teacher education and it challenges demands in a rapidly changing social world. The popular narratives that shape the reform agenda for teacher education transcend teachers' influences, concerns, education and development opportunities beyond the traditional boundaries of teacher education institutions and the classrooms. It views teachers as important agent in the process of social transformation and educational change. It seeks to promote a progressive vision for radical social changes and encourages critique and critical discussion of socio-political, cultural and educational issues.

Popular Theories in Teacher Education

As result of research and continued reflection on practice globally a few popular theories have emerged which are being widely discussed and used in efforts to improve understanding and practice in the field of teacher education. Notably, the theories or concepts, such as constructivism, reflective practice, action research, and collaborative inquiry that pervade the discourse on and provide foundation to emerging model of adult learning, particularly pre-service and in-service education of teachers and teacher educators. It is deemed important to briefly comment on four of such popular theories, taken together they provide potential for a major break though in initial teacher preparation. These areas, if considered serious, can provide a vision for and a direction towards reforming teacher programmes in Pakistan.

Reflective Practice

Reflective practice (Shon, 1983) has been a popular concept dominating the discourses on teacher education and professional development worldwide. According to Loughrain (2006), "Reflection has become the corner stone of many teacher education programs" (p129). In various teacher preparation programmes reflection is considered to be a viable construct that can guide research and reform in teacher education (Cole & Knowles 2000; Loughran, 2006; Ritter, 2009; Qureshi, 1999; LaBoske, 1994; Vivienne, 2000). The continuing interest of researchers, educators and teachers appears from the continued progressing work that is currently underway in the area of reflective practice suggests that the approach will continue to underpin both the practice and research of many teachers and teacher educators around the world.

Despite the dominance of reflective practice in the current discourse, the concept of reflective practice itself represents different meanings to different people in different socio-cultural contexts. Nevertheless, if taken as a general direction for teacher education rather than a template to follow, the notion of reflective practice represents an important aspect of the quest for improved teacher education in Pakistan.

Constructivism

This theory in fact has grown out of the criticism on the cognitive behaviorist theory of learning. It in fact has provided a new conceptual ideology for many in teacher education, both in terms of how research is undertaken and in terms of programme development. Proponent of constructivism reject the positivist view that meaning can be passed from teacher educator to trainee teacher (Fosnot, 1993; Glaserfeld, 2005), as usually practiced in many teacher training institutions in Pakistan (Lindsay, 1993). The constructivist educators believe that beginning teachers as well as experienced teachers construct their own knowledge about teaching. Constructivism provides foundations upon which to base pedagogical principles and practices that emphasize the centrality of learner in the process (Brooks & Brooks, 1999; Richardson & Placier, 2001; Taylor & Coll, 2002). Many teacher education programmes in Western context draw upon the principles of constructivism (Little, 1993; Feiman-Nemser, 1990). Teacher education programmes, particularly in-service training programmes offered by few reputed institutions in private sector in Pakistan have been reported adopting the approaches to teacher in-service education consistent with the theory of constructivism (Jaworski, 1996; Kizilbash, 1998; UNESCO 2006a).

Action Research and Collaborative Inquiry

‘Collaborative inquiry’ and ‘action research’ pervade the current discussion of building professional learning communities in educational institutions, particularly in schools. These recurring themes in teacher development and school improvement have been reported as major intervention strategies that teachers often apply to create norms of cooperation and collaboration in schools (Ali, Qasim, Jaffer & Greenland, 1993; Fullan & Miles, 1992; Louden, 1992). The need of engaging beginning and well as experienced teachers in improvement-or change-oriented action research has been over emphasized in the literature. Research studies from both developed and developing countries have reported the potential benefit of the use of action research, at both the initial teacher preparation level and at the in-service level as well (e.g. Cochran-Smith and Lytle, 1990; Hopkins & West, 1994; Kemmis, 1995; Pardhan, 2002)..

As reported in the literature, teachers directly apply ‘action research’ or ‘collaborative inquiry’ strategy to address issues and alter or improve situations inside and outside the classroom (Beattie, 2002; Mohammad et al.). These two predominantly Western concepts are increasingly being used by educators, teachers and researchers in developing countries to disseminate knowledge and improve their practices. Teachers in developing countries like their counterparts in developed countries also try to apply action research strategies to learn with and from each other, to solve problems inside and outside the classroom and to explore alternatives for teacher development and school improvement (e.g., Choksi & Dyer, 1997; Halai et. al., 2004; Jaworski, 1996; Ming;1999; Pardhan, 2002; Stuart, 1997). For example, from China, Ming (1999) reports the positive effects of school-based, in-service professional development sessions on teachers’ collaboration to challenge the didactic, teacher- and textbook-dominated culture in the school. The teacher development incorporated classroom observations, demonstration lessons and collaborative action research.

Ming argues that this approach to teacher development helped promote a culture of sharing in schools and encouraged teachers to reflect on their work and relate it to school improvement. Similarly, Stuart (1997) describing her collaborative action research project in Lesotho, reports that the teachers’ participation in action research gave them significant knowledge about students’ learning difficulties and about their own role in supporting students as learners. In Pakistan, engagement in the reflective process (reflection on past and current experiences and in involvement actions research projects) enabled teachers to reflect on how to improve teaching and learning in secondary schools (Jaworski; 1996). Likewise, as a result of participation in action research projects, teachers and teacher educators in India developed better understanding of teachers’ work and professional development needs (Choksi & Dyer, 1997). In view of the above perspectives, it can be argued that when action research and collaborative inquiry are combined with reflective practice and constructivist theory of learning and are shared with teachers in a context like Pakistan significant improvement can be achieved in how teachers work and developed. .

Partnerships and Collaboration

Another area where one could find a great deal of discussion involves partnerships and collaborative culture in institution where teacher work or learn. The notion of partnerships is being referred as the major effort to reform initial teacher education on the one hand and improve the school on the other.

The Western literature seems going far suggesting partnership (between schools and universities/education departments) as a panacea for resolving issues facing school reform efforts through teacher education and other measures. The literature is clear in its emphasis that teachers, apart from their educational role, are to play a significant in community-building which is essential for both individual and the society. This envisions a significant diversification in the roles and functions of the teacher (Fullan & Hargreaves, 1992; Save the Children-UK, 2001). Teacher collaboration is a multidimensional concept. Collaboration inside the school is not an end itself but rather a means to create conditions conducive to continued improvement and change in teachers' learning and practices. Mainly, it aims to achieve two broader goals—teachers' professional development and building institutional capacity (Anderson, 2002; Anderson & Nderitu, 2002; Louis & Kruse, 1995)—which are mutually influential and are linked with school improvement and change (Fullan, 1993; Lieberman, 1995; Lieberman & Miller). Many studies worldwide have reported how the norms of effective working relationships among teachers variously benefit schools, teachers and students (Astuto, Clark & Read, 1994; Hargreaves, 1994; Talbert & McLaughlin, 1996). In view of these observations, it is important to underscore the need for teachers in Pakistan to be sensitized to the virtue of collaboration and a spirit of collaboration and partnerships so that they can build a collective vision towards improvement in teaching and learning processes.

Informal Influence on Teacher Change And Development

The popular narratives in the international literature suggest that teacher learning may not be confined to formal pre-service and in-service programmes; teacher can learn a great deal from a variety of informal and self regulated situations. On the other hand the discourse in Pakistani context being influenced by cognitive behaviorist theory of learning emphasizes formal ways of teachers' learning, particularly pre-service or in-service training opportunities. Numerous biographical studies suggest that memories of their own past teachers and teaching strongly influence teachers' classroom practices and their development (Goodson, 1992). The literature on 'learning to teach' mentions a number of informal influences that enable teachers to develop and change their classroom practices. From a very early age, prospective teachers are influenced by their parents and teachers, often without realizing that these experiences will help them in future. Teachers' memories of being students build their expectations of how their own students should learn. Among these informal influences on teachers' practices are memories of the past, such as memories about their teachers, parents, or memories of 'someone significant' in their childhood (Goodlad, 1994). The literature on teacher development suggests that teachers change as they teach; these changes occur as they go through various "phases", "stages" and "cycles" in the course of developing their classroom practices. Huberman (1993) depicted the themes which represent the developmental stages of teachers' careers. He found that teachers moved through: survival and discovery (feelings of fear and enthusiasm); stabilization; emancipation and diversification (or possible stagnation); reassessment; serenity and relational distance; conservatism and complaints, and disengagement (Feiman-Nemser, 1990).

Conclusion and Implications

The overarching conclusion is that public sector institutions of teacher education in Pakistan have failed to serve as agents of positive change in the school education system. Teacher education institutions in the public sector exist in their own right; they do not exist to serve the society. The valuable resources invested in teacher education are being wasted because the outputs in terms of school change and students' learning achievement continue to remain poor. It is time to reflect on and realize this failure and pursue serious efforts at national, regional, local, and individual institutional levels toward reforming teacher education in the country. There should not be a third choice for the underperforming teacher education either to cease to exist or improve their performance in terms developing quality teachers and impacting children's learning. In the final analysis, the most fundamental challenges to development of education in general and teacher education in particular are not necessarily those emphasized in the mainstream literature. The biggest challenge, however, is developing a national vision for the development of educational system in the country of which teacher education is a part. Efforts to reform education need to focus on effective ways to overcome some of the daunting challenges ranging from poor governance to corruption pervading the body and the soul of entire education system. Educational programmes for various educational stakeholders, including in-service and pre-service teacher education programme should concerned themselves with the need to foster fundamental qualities such as professional competencies, moral character, professional ethics, dignity, commitment, honesty, sincerity, dedication, and a spirit of hard work in the people working for education system rather than focusing transfer of educational theories or set of technical skills. National character building has become vital in the context of the grim realities facing Pakistani society today. The social, economic, political, and educational facing today's Pakistan are multifaceted, intricately interlinked and exist across all sectors (Abbas, 2011).

It is therefore imperative that systems, procedures, strategies, and mechanisms are created at all levels to ensure that the policy recommendations once agreed by the political leaderships and the public are implemented in letter and spirit. The emerging theories and popular narratives that shape the contemporary discourse on teacher education in many developed and developing countries suggest that in many ways teachers can profoundly impact the circumstances in their surroundings in order to bring about desirable change in the classroom. Teachers are influenced by the evolving realities and social experiences they undergo in different times and contexts. Consequently, teachers (albeit not all) adopt new roles or construct new identities in the context of classroom, school and society. In Pakistan teachers more often than not are surrounded by the beliefs and practices that are engrained in the conventional image of teachers that imposes limitation on teachers' work and influence beyond the classroom. This calls for efforts to expand the discourse on teachers' roles and responsibilities beyond the classroom situating their non-traditional roles in various areas ranging from promoting collaboration among teachers in school to working for social change in the society.

Teachers are educated at institutions (universities, teacher training colleges) but these institutions are cut off from the school system for which they prepare teachers. Internationally there is a growing emphasis on bringing teacher education closer to schools and making it responsive to schools' changing needs. Efforts are required at all levels to minimize the gap between schools and teacher education institutions. For in-service teacher training the government has depended heavily on donor funded programmes. The federal, provincial and district governments and teacher training institutions need to take concrete measures to institutionalize in-service training opportunities. Increased continuing professional development opportunities may be made available to teachers through both formal and informal ways. Provincial and district governments need to create space in policy to allow the innovations in in-service teacher education introduced by private sectors with financial assistance and technical support from international agencies.

Currently 'research' is not being used as a tool to help gain deeper understanding into the varied issues and opportunities that surround teacher education in Pakistan. If there is little research it has merely focused merely on quantitative aspects teacher education. In-depth understanding of various aspects of teacher education from a qualitative vantage point is lacking. There is a need of efforts at government, institutional as well as individual levels to create and support an environment that encourages studies, which use methods such as ethnography, biography, in-depth case studies, life history, etc. within qualitative research paradigm, to explore in-depth macro and micro issues confronting teacher education in Pakistan.

Teacher learning may not be confined to formal pre-service and in-service programmes; teacher can learn a great deal from a variety of informal and self regulated situations. The international perspectives combined with experience from Pakistani context suggest that the concepts such as reflective practice, action research, constructivism, and partnership and collaboration, if used appropriately and wholeheartedly, offer great promise for change in the quality of teachers' learning, development and work. Teacher education programmes in Pakistan therefore need to focus on transforming teachers and teacher educators as 'moral agents', 'constructivist pedagogues' and 'reflective practitioners'. This is how teachers learning from training programmes can get translated into behaviours and actions in the classroom.

To conclude, there are no quick fixes or short cuts to improving education system in general and teacher education system in Pakistan in particular. Complex problems demands well thought through strategies to resolve. Pakistan needs a nationally agreed comprehensive framework to be used as a national reference resource to seek guidance, direction and vision toward improving all problematic facets of teacher education system highlighted in this paper. Policies and subsequent Action Plans or Five Year Plans while setting targets for reform in teacher education system should avoid a 'wish list' approach. They should provide a comprehensive policy framework with clearly defines, doable targets, set realistic timeline and specify concrete outcomes with clear identification of actions or strategies, required human and material resources, monitoring and evaluation procedures, accountability mechanism. The multiplicity of teachers' roles, the complex nature of the change process, the uncertainties embedded in teaching, the individualistic make up of teachers, and the inevitable dynamic interactions between the teachers and their social milieu entail a holistic approach to teacher education. This integrated approach has to be multi-dimensional in nature, broader in scope to incorporate all the essential ingredients from various approaches to teacher education.

REFERENCES

- Abbas, H. (2011). *A vision for building a better future*. Asia Society Pakistan 2010 Study Group Report
- Academy for Educational Development (2005). *Directory of Teacher education/training Institutions in Pakistan*. USAID/Pakistan Teacher Education and Professional Development Project.
- Academy for Educational Development (2006). Performance gap analysis and training needs assessment of teacher training institutions. Pakistan teacher education and professional development. Achievement: Evidence from Pakistan. *BRIDGES Research Report Series*, March No. 8. Cambridge USA: Harvard.
- Academy of Educational Planning and Management (2009). *Pakistan Education Statistics 2008- 2009*. Retrieved from: <http://www.moe.gov.pk>; on April 22, 2011
- Aga Khan University (2002). *Research and policy dialogues on key issues in education. Discussion report*. April 23, 2002, Karachi.
- Ahmad, M. (2009). *The problematique of education in Pakistan*. Journal of Management and Social Sciences, vol. No.1, 13-21.
- Aleem, I. (2004). *Problems and prospect of higher education in Pakistan*. Unpublished
- Ph.D. thesis*, University of Arid Agriculture, Rawalpindi <http://eprints.hec.gov.pk/440/>; Retrieved on 25th August 2010.
- Ali, M.A., Qasim, S.A., Jaffer, R., & Greenland, J. (1993). Teacher-centered and school-base models of collegiality and professional development: Case studies of the Teachers' Resource Center and the Aga Khan School System in Karachi, Pakistan. *The Journal of Educational Research*, 19(8), 735-754.
- Ali, T. (2007). Understanding how improvement-oriented high school teachers experience change in Northern Pakistan. *An Unpublished Doctoral Thesis*, Ontario Institute for Studies in Education of the University of Toronto, Canada.
- Ashraf, D. (2004). Experiences of women teachers in Northern Pakistan. *Unpublished doctoral dissertation*, University of Toronto.
- Asian Development Bank (2002). *The project completion report. Validation Study of the Universal Primary Education Project in Punjab – 2003* <http://www.lins.no/db/pdf/report200401.pdf> retrieved on June 2, 2008
- Asian Development Bank ((1992). *Appraisal of teacher training project in Islamic republic of Pakistan*. Islamabad. Ministry of Education, Islamabad.
- Asian Development Bank (2002). *Teacher Training Project. Project Completion Report*. IN.285-02.
- Asian Development Bank ((1992). *Appraisal of teacher training project in Islamic republic of Pakistan*. Islamabad. Ministry of Education.
- Bates, R. (2005). On the future of teacher education: Challenges, context and content. *Journal of Education for Teaching* 31(4), 301-305.
- Anderson, S.E. (2002). The double mirrors of school improvement: The Aga Khan Foundation in East Africa. In S.E. Anderson (Ed.), *Improving schools through teacher development: Case studies of the Aga Khan Foundation Projects in East Africa* (pp1-20). Netherlands: Swets & Zeitlinger Publishers.
- Anderson, S.E., & Nderitu, S. (2002). Decentralized partnerships for school-based teacher development in Mombassa, Kenya. In S.E. Anderson (Ed.), *Improving schools through teacher development: Case studies of the Aga Khan Foundation Projects in East Africa* (pp.137-184). Netherlands: Swets & Zeitlinger Publishers.
- Astuto, T., Clark, D., & Read, A. (1994). *Roots of reform: Challenging the assumptions that control education reform*. Bloomington: Phi Delta Kappan International.
- Barber, S.M. (2010). Education reform in Pakistan: This time it's going to be different. Bashiruddin, A. (2003). Learning English and Learning to Teach English: The Case of Two Teachers of English in Pakistan. *An Unpublished Doctoral Thesis*, Ontario Institute Studies in Education of the University of Toronto, Canada.
- Beattie, M. (2001). *The Art of learning to Teach: Pre-service teacher Narratives*. New Jersey: Merrill /Prentice Hall.
- Beattie, M. (2002). Finding new words for old songs: Creating relationship and community in teaching education. In H. Christiansen & S. Ramadevi (Eds.). *Reading the educator: Global perspective on community Building* (pp. 16-35). State University of New York Press.
- Brooks, M.G., & Brooks, J.G. (1999). The Courage to be constructionist. *Educational Leadership*, 57(3), 18-24.
- Bottery, M. (2006). Education and globalization: Redefining the role of the educational professionals. *Educational Review*, (58(1), 95-113.
- Boyle, B., While, D., & Boyle. T. (2003). A longitudinal study of teacher change: what makes professional development effective: University of Manchester, Institute for Political and Economic Governance, *Working Paper No. 1*. Manchester: University of Manchester.
- Butt, M.H and Shams, F. (2007). *Final Report on Quality Assurance of Teacher Training Programs*: Directorate of Staff Development & Punjab, World Bank & UNESCO, Islamabad.
- Campbell, E. (2005). Challenges in fostering ethical knowledge as professionalism within school teaching communities. *Journal of Educational Change*, 6(3), 207-226.
- Choksi, A., & Dyer, C. (2000). North-south collaboration in educational research: Reflection on Indian experience. In Crossly & G. Vulliamy (Eds.). *Qualitative educational research in developing countries* (pp. 265-294). London: Garland Publishing, Inc.
- Cocheran-Smith, M., & Fries, M.K. (2001). Sticks, stones, and ideology: The discourse of the reform in teacher education: *Educational Research*, Vol. 30, No.8, pp. 3-15.
- Clendenin, D.J., & Connelly, M. F. (1995). Teachers' Professional Knowledge Landscape: Secret, Sacred, and Cover Stories. In D.J. Clendenin, M.F. Connelly (Eds.) *Teachers' Professional Knowledge Landscapes* (pp.1-15). New York: Teachers College Press.
- Cole, A.C., & Knowles, J.G. (2000). *Researching Teaching: Exploring Teacher Development through Reflexive Inquiry*. Toronto: Allyn & Bacon.
- Dewey, J. (Ed.) (1964). *John Dewey on Education: Selected writing*: Chicago: University of Chicago Press.

- Darling-Hammond, L. (2002). Variation in Teacher Preparation: How Well Do Different Pathways Prepare Teacher to Teach. *Journal of Teacher Education*, 53(4), 286-302.
- Davis, L., & Iqbal, Z. (1997). Tension in Teacher Training for School Effectiveness: The Case of Pakistan. *School Effectiveness and School Improvement*, Vol. 8, No. 2, pp. 254-266.
- Day, C. (2000). *Developing teachers: The challenges of lifelong learning*. London, UK: The Falmer Press.
- Dawson, (2006). Teacher inquiry: A vehicle to merge prospective teachers' experiences and reflection during curriculum-based, technology-enhanced field experience. *Journal of Research on Technology in Education*, 38(3), 265-292.
- Darling-Hammond, L. (1996). Teachers and Teaching: Sign of a Changing Profession. In W.R. Houston (Ed.), M. Huberman, J. Sikula (Associate Eds.). *Handbook of Research on Teacher Education*. New York: Macmillan Publishing Company.
- Darling-Hammond, L. (2002). Variation in Teacher Preparation: How well do different pathways prepare teacher to teach. *Journal of Teacher Education*, 53(4), 286-302.
- DIFSD and USAID (2006). *Options and Recommendations for Education Sector Budget Support in Pakistan*.
- Directorate of Staff Development, Punjab, Lahore (2006). *Continuous Professional Development Framework for Primary School Teachers. Professional Development for Quality Learning*.
- Fakir Mohammad, R., Vazir, N., Kumari, R. and Hassan, M. (2007). *Impact of Donor-funded In-service Teacher Education Projects on Teaching and Learning in the Province of Sindh. (Draft Report)*. Aga Khan University, Institute for Educational Development, Karachi, Pakistan.
- Fechner, K.M. (1983). Alternative Paradigms of Teacher Education. *Journal of Teacher Education*, 39(3), 3-9.
- Fechner, K.M., & Liston, D.P. (1985). Varieties of Discourses in Supervisory Conferences. *Teaching and Teacher Education*, Vol.47, No.2, pp.155-174.
- Feiman-Nemser, S. (1990). Teacher Preparation: Structural and Conceptual Alternatives. In J. Sikula (Ed.). *Handbook of Research on Teacher Education* (212-233). London: Prentice Hall International.
- Fred, T. (2000). Pathways to teacher professional development. Unpublished Masters' Thesis, Aga Khan University-Institute for Educational Development.
- Fosnot, C.T. (2005). Constructivism revisited: Implications and reflections. In C.T. Fosnot (Ed.). *Constructivism: Theory, perspective and practice (2nd Edition)* (pp.276-292). New York: Teachers College Press.
- Fullan, M. (1993). Why teachers must become change agents. *Educational Leadership*, 50(6), 12-17
- Fullan, M. (2001). *The New Meaning of Educational Change (3rd Ed.)*. Toronto: Irwin Publishing Ltd.
- Fullan, M. (1992). *Successful school improvement*. Buckingham: Open University Press.
- Fullan, M., & Miles, M. (1992). Getting reform right: What works and what doesn't. *Phi Delta Kappan*, 73(10), 744-752.
- Fullan, M.G., & Stielgebauer, S. (1991). *The new meaning of educational change*. New York: Teacher college Press.
- Frontier Education Foundation (2006). Group Work & Recommendations. National Workshop on Education System in Pakistan & 21st Century. Peshawar, June 12-14, 2006.
- Furniss, Elaine (2005). Report of a Needs Assessment of Government Colleges for Elementary Teachers, Punjab Province, Pakistan. Government of Pakistan-UNICEF Program of Cooperation.
- Giroux, H.A. (1995). Teachers as Public Intellectuals. In Ornstein, A.C. (Ed.). *Teaching: Theory into Practice* (pp. 373-384), Boston: Allyn and Bacon.
- Glaserfeld, E. V. (2005). Introduction: Aspect of constructivism. In C.T. Fosnot (Ed.). *Constructivism: Theory, perspective and practice (2nd Edition)* (pp.3-7). New York: Teachers College Press.
- Glatthorn, A.A. (1992). *Teachers as agents of change: A new look at school improvement*. Washington, D.C.: National Educational Association.
- Goodlad, J. (1994). *Educational Renewal: Better Teachers, Better Schools*. San Francisco: Jossey-Bass.
- Goodson, I. (1992). *Studying Teachers' Lives*. New York: Teacher College Press.
- Government of Pakistan (2009). *National Education Policy*. Ministry of Education.
- Government of Pakistan (2006a). *Education in Pakistan: A white paper, document to debate and finalize the national education Policy, National Education Policy Review Team, Ministry of Education*.
- Government of Pakistan (2006b). National Education Conference 2006: Delegate Brief Ministry of Education.
- Government of Pakistan (2006c). Quality and Standards in Education: Identifying Challenges and Solutions: Teacher Education and Assessments. Group Discussion. National Education Conference. Ministry of Education
- Government of Pakistan (2005). *National educational assessment system, Ministry of Education, Islamabad*
- Government of Pakistan (2004). *Education Sector Reforms: Action Plan 2001-02-2005-06. Ministry of Education*.
- Government of Pakistan (2004). *Public Private Partnership in the Education Sector: Education Sector Reforms Action Plan 2001-2005: Policy, Options, Incentive Package And Recommendations*. Ministry of Education, Islamabad.
- Government of Pakistan (2004). The development of Education: National Report of Pakistan: Ministry of Education, Islamabad.
- Government of Pakistan (2002). Draft of National Plan of Action on Education For All (2000-2015). Ministry of Education, Islamabad.
- Government of Pakistan (2002). Task Force on Improvement of Higher Education in Pakistan.
- Government of Pakistan (2002b). *Report of the committee of experts on standard of education improvement at SSC and HSSC levels*.
- Gulzar, H.S., Bari, F., Ejaz, N. (2005). *The role of NGO in Basic education in Pakistan*.
- LUMS-McGill Social Enterprise Development Programme.

- Guskey, T.R., & Sparks, D. (1996). Exploring the relationships between staff development and improvement in student learning. *Journal of Staff Development*, 174(4), 34-38.
- Halai, A., Ali, M.A., Kirmani, N., & Mohammad, R.F. (2004). On-going Impact of the Advanced Diploma in Mathematics Education. In A. Halai. and J. Rarieya (Eds.), *Impact: Making Difference: Proceeding of an International Conference held at AKU-IED, Karachi, Pakistan*, pp.135-146.
- Halai, N. (2001). Munazza's Story: Understanding Science Teaching and Conceptions of Science in Pakistan Through a Life History Method. *An Unpublished Doctoral Thesis, Ontario Institute for Studies in Education of the University of Toronto, Canada*.
- Hargreaves, A. (1994). *Changing Teachers, Changing Times: Teachers' Work and Culture in The Postmodern Age*. New York: Teachers College Press.
- Havelock, R.G., and Huberman, A.M. (1978). *Solving Educational Problems: The Theory and Reality of Innovation in Developing Countries: A study Prepared for the International Bureau of Education*.
- Hargreaves, A. (1997). Rethinking educational change: Going deeper and wider in the quest for success. In A Hargreaves (Ed.). *Year Book: Rethinking educational change with hearty and mind* (pp. 1-27). Alexandria, Virginia: ASCD.
- Hargreaves, A. (1991a). Curricular reform and teacher. *The Curriculum Journal*, 2(3), 299-258.
- Hargreaves, A. (1994). *Changing teachers, changing times: teachers' work and culture in the postmodern age*. New York: Teachers College Press.
- Hayes, L.D. (1987). *The Crisis of Education in Pakistan* Delegate Brief, Ministry of Education. Lahore: Vanguard.
- Hoodbhoy(Ed.). (1998). *Education and the State: fifty years of Pakistan*. Karachi: Oxford Press.
- Hopkins, D., & West, M. (1994). Teacher development and school improvement: An account of the improving the quality of education for all (IQEA) project. In R. Walling (Ed.). *Teacher as leaders: Perspectives on the professional development of teachers* (pp.179-199). Bloomington, IN: Phi Delta Kappa Educational Foundation.
- Huberman, M. (1993). *The Lives of Teachers*. London: Cassell.
- Jaffer, R. (2005). *Teacher Education. Donor Support to Education: Lessons Learned Meeting*, 23-24 June, 2005. Islamabad. Final Report.
- Jamil, B.R. (2004). *Teacher education in Pakistan: A (draft) Position Paper presented at the national Conference on teacher education held from December 20, 004. Academy for Educational Development (AED).JBIC Today, November 2004, http://www.jbic.go.jp/english/base/publish/today/pdf/td_2004nov.pdf, retrieved on May 30, 2008*
- Jaworski, B. (1996). The implication of theory for a new master's programme of teacher educators in Pakistan. In C. Brock Ed). (1999). *Global perspective on teacher education* (pp.130-142).Wallingford: Triangle
- Joyce, B.R. (1987). Learning to learn. *Theory and Practice*, Vol. 26, No.1 pp.416-428.
- Joyce, B. and Showers. B. (1980). Improving in-service education training. The new message of research, Educational leaderships. In Harrold E. Mitzel (Eds.). *Encyclopedia of Educational Research (fifth Edition)*. New York: The teacher College Press.
- Joyce, B. and Showers. B. (1980). *Student achievement through staff development*: New York: Longman.
- Khan, H.K. and Halai, N. (2008). *Bringing reforms in teacher education: what do teacher educators' profiles tell us about it*. Paper presented at international conference on the status of educational reform in developing countries, April 8-10, 2008. Aga Khan University-Institute for Educational Development
- Kemmis, S. (1985). Action research and the politics of reflection. In D. Bound, R. Keogh, & D. Walker (Eds.). *Reflection: Turning experience into learning* (pp.139-163). New York: Nichols.
- Kanji, G. (2000). *Sustainability of professional development and school improvement*: Paper presented in the 3rd Annual School Improvement Program Conference of the Aga Khan Education Service held in, Nairobi, Kenya in September 2000.
- Khamis, A., & Jawed, S. (2006). Teacher education and school improvement: a case study from Pakistan. In I. Farah and B. Jaworski (Eds.). *Partnerships in educational development* (pp.171-182). UK: Symposium Books.
- Khan, H.K. (2009). *Becoming a teacher educator in Pakistan: Stories from personal and professional lives*. Unpublished doctoral thesis, Aga khan University-Institute for Educational Development, Karachi, Pakistan.
- Kizilbash, H. 1998). Teaching teachers to teach. In P. Hoodbhoy(Ed.). *Education and the State: fifty years of Pakistan* (pp.102-135). Karachi: Oxford Press.
- Kosnik, C & Beck, C., (2009). *Priorities in teacher education: the 7 key elements of pre-service preparation*. London and New York: Routledge.
- Kubow, K. P. (1999). Preparing Future Secondary Teachers for Citizenship Education Role: A Possible Direction for Perspective Education in the New Century. *Asia-Pacific Journal of Teacher Education and Development*, Vol. 2, No.2, pp.53-64.
- Kumar, K. (1990). The meek dictator. The Indian teacher in historical perspective. In N Entwistle (Ed.). *Handbook of educational ideas and practices* (pp. 312-347). London: Routledge.
- LaBoske, V.K. (1994). *Development of Reflective Practice: A Study of Pre-service Teachers*. New York: Teachers College Press.
- Lawton, D. (1990). The future of teacher education. In N.J. Graves (Ed.). *Initial teacher education: Policies and progresses*. London: Kogan Press.
- Levine, A. (2006). Educating school teachers. Executive summary. Education Schools Project. Teachers College press.
- Lewin, K. M., & Sturat, J.S. (2003). Research teacher education. New perspectives on practice, performance and policy. *Muster Synthesis Report*. Sussex: Department for International Development (DFID) Educational Paper.
- Lieberman, A., Saxl, E.R. & Miles, M.B. (2000). 'Teacher leadership: ideology and practice. In *the Jossey-Bass Reader on Educational Leadership* (pp. 339-345). Jossey-Bass.
- Lieberman, A. (1995). Practices that support teacher development: Transforming conceptions of professional learning. *Phi Delta Kappan*, 76(8), 591-596.

- Lieberman, A., & Miller, L. (1994). *Teachers-transforming their world and their work*. New York: The Falmer Press.
- Longworth, N., & Davies, W.K. (1996). *Lifelong learning*. London: Kogan Page.
- Loughran, J.(2006). *Developing pedagogy of teacher education: Understanding teaching and learning about teaching*. London and New York: Routledge.
- Lindsay, B. (1993). The profession of teaching: Complexities in developing countries. *Journal of Teaching and Teacher Education*, 9(1).
- Little, J.W. (1993). Teachers' Professional Development in a Climate of Educational Reform. *Educational Evaluation and Policy Analysis*, Vol. 5, No. 2, pp.129-151.
- Little, J.W. (1993a). Professional communities in comprehensive high schools. The two worlds of academic and vocational. In M. McLaughlin & J.W. Little (Eds.). *Cultures and context of teaching* (pp.79-103). New York Teachers College Press.
- Louden, W. (1992). Understanding reflection through collaborative research. In A. Hargreaves & M. Fullan (Eds.). *Understanding teacher development* (pp.178-215). London: Cassell.
- Louis, K. S., & Kruse, S.D. (1995). *Professionalism and community: Perspectives on reforming urban schools*. Thousand Oaks, CA: Corwin.
- Luke, A, McArdle, F. (2009). A model for research based state professional development. *Asia-Pacific Journal of Teacher Education*, Vol. 37, No.3, 231-251.
- Mahmood, K. (1999). *Effectiveness of in service training imparted through teacher training project*. An unpublished Master of philosophy thesis in education, Allama Iqbal Open University, Islamabad.
- Marshall, J.M. 2009). Describing the elephant: Pre-service teachers talk about spiritual reason from becoming a teacher. *Evidence-based Research and Diverse methods of Teacher Development* , Vol. 36, No.2, 25-44.
- Mattice, V.M. (2002). I Am, Therefore, We Are: A Narrative Inquiry into the Stories of Experience of Three Women Teachers of Baluchistan and the Northern Areas of Pakistan. *An Unpublished Doctoral Thesis*, Ontario Institute for Studies in Education of the University of Toronto, Canada.
- Ministry of Education (2005). "*Directory of Donors' Assistance for Pakistan's Education Sector*", Government of Pakistan. Islamabad.
- Niyozov, S. (2001). Understanding Teaching in Post-Soviet, rural, Mountainous Tajikistan: Case Studies of Teachers' Life and Work. *An Unpublished Doctoral Thesis*, Ontario Institute for Studies in Education of the University of Toronto, Canada.
- Nizamani, M.A., Malik, M.I. and Manzoor-ul-Haque (1998). Report for the study on critical evaluation of teacher training institution in Sindh: Under the teacher training project, Government of Sindh. No. 5-391-08-004-P March 28, 2008. U.S. Agency for International Development Office of Inspector General 1300 Pennsylvania Ave, NW Washington, DC 20523.
- Nodding, N. (2001). The Caring Teacher. In V. Richardson (Ed.). *Handbook of Research on Teaching* (pp.99-105). Washington, DC: American Educational Research Association.
- Pakistan Teacher Education and Professional Development Program (2004). "PTEPDP:A Quarterly Newsletter". Issue-I. December 2004.
- Pardhan, H. (2002). *Collaborative action research for science teacher's pedagogical content knowledge enhancement*: Unpublished doctoral dissertation, Department of Secondary Education University of Alberta
- Qureshi, J. (1999). Development of reflective practice through in-service teacher education programme: A case study of a participant. Unpublished Masters' Thesis, Aga Khan University-Institute for Educational Development.
- Randi, J., & Corno, L. (1997). Teachers as innovators. In B.J. Biddle, Good, T.L. & I.F. Goodson (Eds.). *International Handbook of Teacher and Teaching* (pp.1163-1221). Netherlands: Kluwer Academic Publishers.
- Richardson, V., & Placier, P. (2001). Teacher change. In V. Richardson (Ed.). *Handbook of Research on Teaching* (pp.905-950). Washington, DC: American Educational Research.
- Ritter, J.K. (2009). Developing a vision of teacher education: Helping classroom teacher understanding evolved in the university environment. Studying teacher education: *A Journal of Self-Study of Teacher Education Practices*, Vol. 5, No. 1, 45-60.
- Rizvi, M. 2004). The relationship between school reforms and teacher professional development in government primary schools in Karachi, Pakistan. *Unpublished doctoral dissertation, Queensland University of Technology, Brisbons, Australia*.
- Rugh, A., Malik, A., & Farooq, R. (1991). Teaching Practice to Increase Students Achievement: Evidence from Pakistan. *BRIDGES Research Report Series*, March No. 8. Cambridge USA: Harvard.
- Saleem, M. (2009). The development and state of the art of adult learning. National Report of Pakistan: Islamabad: Project Wing Ministry of Education.
- Save the Children-UK (2001). *What Makes a Good Teacher? Perspectives of Children, Parents and Teachers*. Institute of Social Sciences, Lahore.
- Sayers, J. (2006). European perspectives on teacher education and training. *Comparative Education*, 42(1), 63-75.
- Selvam, S.K.P. (2009). *Global trends in teacher education*. New Delhi: A.P.H. Publishing Corporation.
- Sergiovanni, T. (1992). *Moral Leadership: Getting to the Heart of School Improvement*. San Francisco: Jossey-Bass.
- Schon, D.A. (1983). *The Reflective Practitioner*. New York: Basic Books.
- Shah, Mubarak Hussain (2000). *The Impact of PEP-ILE inputs on Children's Achievement and Teacher's Behavior*. PEP- GTZ. Abbott Abad.
- Shriller, M. Schlee, B., Hamil, M., and Libler, R. (2009). Creating teachers' perception, behavioral, and attitudinal change using professional development workshops. *Teacher Development*. Vol. 13, No.2, 125-134.
- Schulman, L. (1987). Knowledge and Teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Siddique, S. (2007). *Rethinking Education in Pakistan: Perceptions, practices, and possibilities*. Karachi-Lahore-Islamabad: Paramount Publishing Enterprise.

- Starratt, J. R. (1994). *Building an Ethical School: A practical Response to the Moral Crisis in Schools*. London: The Falmer Press.
- Stoll, L. (1999). Realising our potential: Understanding and developing capacity for lasting improvement. *School Effectiveness and School Improvement*, 10(4), 503-532.
- Strike, S. K., & Soltis, J. F. (1992). *The Ethics of Teaching*. New York: Teachers College Press. Social Policy Dialogue Center (2003). Social development in Pakistan: The state of education: *Annual Review (2002-2003)*, Karachi.
- Stuart, J. (1997). Improving our practice: Collaborative classroom action research in Lesotho. In M. Crossley & G. Vulliamy (Eds.). *Qualitative educational research in developing countries* (pp.155-170). London: Garland.
- Sultana, N. (2001). *Elementary Education in Pakistan: current Status, Issues and Future Strategies*. Multi-Donor Support Unit.
- Sykes, G. (1999). Teacher and student learning: Strengthening their connection. In L. Darling- Hammond & G. Sykes (Eds.). *Teaching as the learning profession: Handbook of policy and practice* (pp.275-286). San Francisco, CA: Jossey-Bass.
- Talbert, J.E. and McLaughlin, M. W. (1996). Teacher Professionalism in Local School Contexts. In I.F. Goodson, and A. Hargreaves(Eds.). *Teacher's Professional Lives* (pp. 127-153). London: Falmer Press.
- Tay-Koay, S. L. (1999). Teacher development: Understanding the struggles of classroom Teachers. *Asia-Pacific Journal of Teacher Education and Development*, 2(1), 15-28.
- Taylor, N., & Coll, R. (2002). Constructivist-informed pedagogy in teacher education: An overview of a year-long study in Fiji. *Asia-Pacific Journal of Teacher Education & Development*, 5(1), 47-76.
- Thiessen, D., & Kilcher, A. (1993). *Innovations in teacher education: A review of recent literature*. Toronto: MGS Publications Services.
- Thiessen, D., Pike, R. (1992). *Project 95 +: Image of the future teachers*. Faculty of Education, University of Toronto.
- UNEESCO (2008). Status of teacher education in the Asia Pacific region. International Reading Association: Bangkok. <http://www.unescobkk.org/education/apeid/programme>. Accessed on July 5, 2009.
- UNEESCO (2006a). *Situation Analysis of Teacher Education and Professional Development: Pakistan*. USAID/Teacher Education and Professional Development Project.
- UNEESCO (2006c). Strategic framework for Teacher Education and Professional Development Project
- UNESCO (2006d). Roundtable on Teacher Education: Major Objectives of Teacher Education.
- USAID & UNEESCO & Idara-e-Taleem- o-Aagahi (2008). *Status of teacher in Pakistan*.
- USAID & UNEESCO (2009). *Directory of Teacher Education Institutions in Pakistan*. USAID (2004). Pakistan teacher education and professional development programme (PTEPDP): Performance gap analysis and training needs assessment of teacher training institutes
- Valli, L. (1990). Moral Approaches to Reflective Practice: In R.T.Clift, W.R.Houston, & M.C. Pugach (1990). *Encouraging Reflective Practice in Education. An Analysis of Issues and Programs* (pp.39-56). New York: Teachers College Press.
- Vazir, N. and Retallick, J. (2007). Perspectives on teacher status: Issues and challenges.
- Vivienne, G. (2000). The Reflective Dimension in Teacher Education. *International Journal of Educational Research*, Vol. 33, No. 5, pp.539-555.
- Warwick, Donald P. and Fernando M. Reimers (1991). Good Schools and Poor Schools in Pakistan. Development Discussion Paper No. 399 ES. HIID.
- World Bank (2006). *Program Document for a Proposed Third Punjab Education Sector Development Policy Credit*. Report No. 35441-PK
- World Bank (2004). *Implementation Completion Report on a Credit to the Islamic Republic of Pakistan for a Northern Education Project*. Report No. 8241-PK.
- World Bank (1998). *Project Appraisal Document on a Proposed Credit to the Republic of Pakistan for a Second Social Action Program Project*. Report NO. 17398-PAK.
- World Bank (1996). *Pakistan Improving Basic Education: Community Participation, System Accountability and Efficiency*. Report No. 14960.
- World Bank and Department for International Development (2005). *Teacher Management Study*, Punjab.
- World Population Foundation, Pakistan Quarterly Progress Report-January-February 2009: WPE.
- Zellers, L. L., & Grandson, D. A. (1997). Leadership laboratories: Professional Development for 21st century. *National association of Secondary School Principals Bulletin*, 81(585), 45-50.
- Zeichner, K.M. (2009). *Teacher education and the struggle for social justice*. New York and London. Rutledge.
- Zeichner, K.M., & Flessner, R. (2009). Educating Teachers for social justice. In K.M, Zeichner (Ed.). *Teacher education and the struggle for social justice* (pp. 24-43). New York and London: Rutledge.